

RESEARCH INTERESTS

- Quantum Computing
- Machine Learning
- Superconducting Qubits
- Data Analysis

EDUCATION

Sharif University of Technology B.Sc. in Computer Engineering, GPA: 19.16/20.00 B.Sc. in Physics (double major), GPA: 20.00/20.00	Tehran, Iran 2020–Current
Young Scholars Club Preparation Course for the International Physics Olympiad	Tehran, Iran 2019–2020
Allame Helli High school Diploma in Mathematics and Physics, GPA: 19.66/20.00	Tehran, Iran 2017–2020

TEACHING EXPERIENCE

• Linear Algebra (TA) <i>Prof. Samira Hossein Ghorban, Sharif University of Technology</i>	Spring 2023
• Engineering Probability and Statistics (TA) <i>Prof. Ali Sharifi-Zarchi, Sharif University of Technology</i>	Fall 2022
• Intro Programming (TA) <i>Prof. MohammadAmin Fazli, Sharif University of Technology</i>	Fall 2022
• Physics Olympiad (Teacher) <i>Allame Helli High school</i>	2019–2022

HONORS AND AWARDS

• Silver medalist at 4 th European Physics Olympiad, Romania	2020
• Sir Isaac Newton Award, University of Waterloo, Canada [TODO: Link to homepage]	2020
• Gold medalist at 31 st Iranian Physics Olympiad	2019

NOTABLE COURSES

• Introduction to Quantum Technologies [HOMEPAGE] <i>Psiket School of Science and Technology (partially funded scholarship)</i>	March 2023
• Qubit by Qubit [HOMEPAGE] [CREDENTIAL] <i>IBM Quantum computing (fully funded scholarship)</i>	September 2022–April 2023
• Quantum Mechanics <i>Sharif University of Technology</i>	Spring 2023
• Artificial Intelligence <i>Sharif University of Technology</i>	Spring 2023

- Data Transmission Fall 2022
Sharif University of Technology
 - Key Concepts in Blockchain Technology [CREDENTIAL] Fall 2022
IEEE Iran section
 - Electromagnetics 2 Spring 2022
Sharif University of Technology
 - Signals and Systems Fall 2021
Sharif University of Technology
 - Advanced Programming Spring 2021
Sharif University of Technology
 - Hands on Particle Physics [HOMEPAGE] 2018
The International Particle Physics Outreach Group (IPPOG)
- Integrated Photonics for Next Generation Technologies INGEN2023 <https://ingen2023.epfl.ch/WSS?>

PROJECTS

- LPQM Automatic calibrator • Verilasm (Python, Verilog, 2022)
[Link to report] [Link to demo] [c4science] [GitHub] • ASM chart to Verilog compiler and simulator [GitHub]
- LPQM Switch controller
[Link to report] [Link to demo] [c4science] [GitHub]
- LPQM Wafer Analyzer
The task was to setup an MPI 2000 prober and Keithley parameter analyzer to communicate and let the analyzer control the
- Models of Precolation Complex Systems
Tweaking SIR models and simulating with graph and probability and comparing the results.
- Verify Virial Theorem Three Body
Very little can be known analytically from the three body gravitational problem. But the principles have to work and keep up
- Yu-Gi-Oh (Java, 2021)
Graphical Trading Card Game [GitHub]

SKILLS

- **Tools:** IBM Quantum Lab, Git, L^AT_EX, Linux
- **Programming:** Qiskit, Python, R, Matlab, C/C++, Java, Verilog, Racket

LANGUAGES

- **Persian:** Native
- **English:** Fluent

EXTRACURRICULAR ACTIVITIES

- Programming hobby
Bluh Bluh Bluh. Cloudflare, scripts, ... [Links to GitHub]
- Photography
Bluh Bluh Bluh. [Link to portfolio]
- Movies
Bluh Bluh Bluh. [Link to IMDb]

- Cinema Helli film-making group 2017
I Co-founded a film making group which won the the best student performance award in the school's seminar.
- LAF student journal editor-in-chief 2016
I gathered a group of ten to write and publish a student journal roughly every month.
- Student Blog 2015
I started a student weblog ("1-3helli1.blog.ir") and gathered a team of five. The blog ranked among the top 10 blogs of the year in the country. [RANKING]